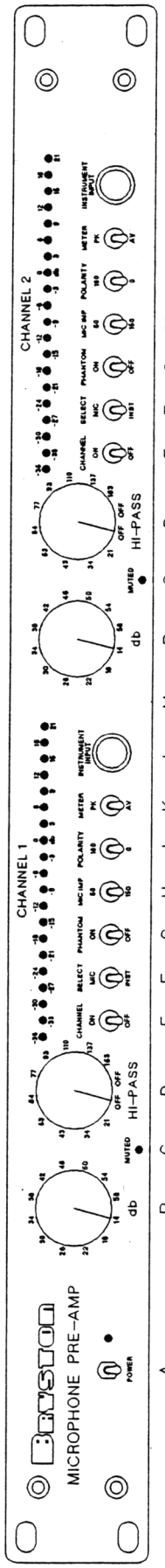
BRYSTON

BMP2

MICROPHONE PREAMPLIFIER OWNER'S MANUAL

BMP-2 MICROPHONE PREAMP



Front panel controls:

A: POWER Switch
Applies incoming power to circuitry. LED indicates when power applied.

B: db - Gain Switch
The 12 position "Gain Switch" changes the channel gain in 4dB steps, from 14dB through 58dB. Select the desired gain to achieve proper output level at the program meter.

C: MUTED Indicator
Indicates red when channel output is off. (see E: Channel - on/off switch)

D: HIGH PASS Filter Switch
The "Hi-Pass" switch selects 1 of 10 low frequency filters. The 21Hz filter has a 6dB response below cutoff. All other filters have a 12dB per octave response. Use the "High-Pass" filters to reduce the effects of microphone "popping", wind noise, rumble etc.

E: CHANNEL - On/Off Switch
Mutes channel output in off position. The muted output is indicated by the red led indicator "muted". The output will also mute should the "phantom power" switch be activated when the "channel" switch is in the on position. The output will be muted for 4-5 seconds in this event.

F: SELECT - Mic/Inst Switch
The "Select" switch selects the input to the pre-amp. The "mic" position selects the signal from the rear panel XLR. The "inst" (Instrument) position selects the signal from the 1/4" phone jack on the front panel.

G: PHANTOM - On/Off Switch
Switched to "ON" will provide 48Vdc to pins 2 + 3 of the mic input XLR connector for "Phantom Powering" compatible microphones. *The output is muted 4 to 5 seconds when this switch is activated.*

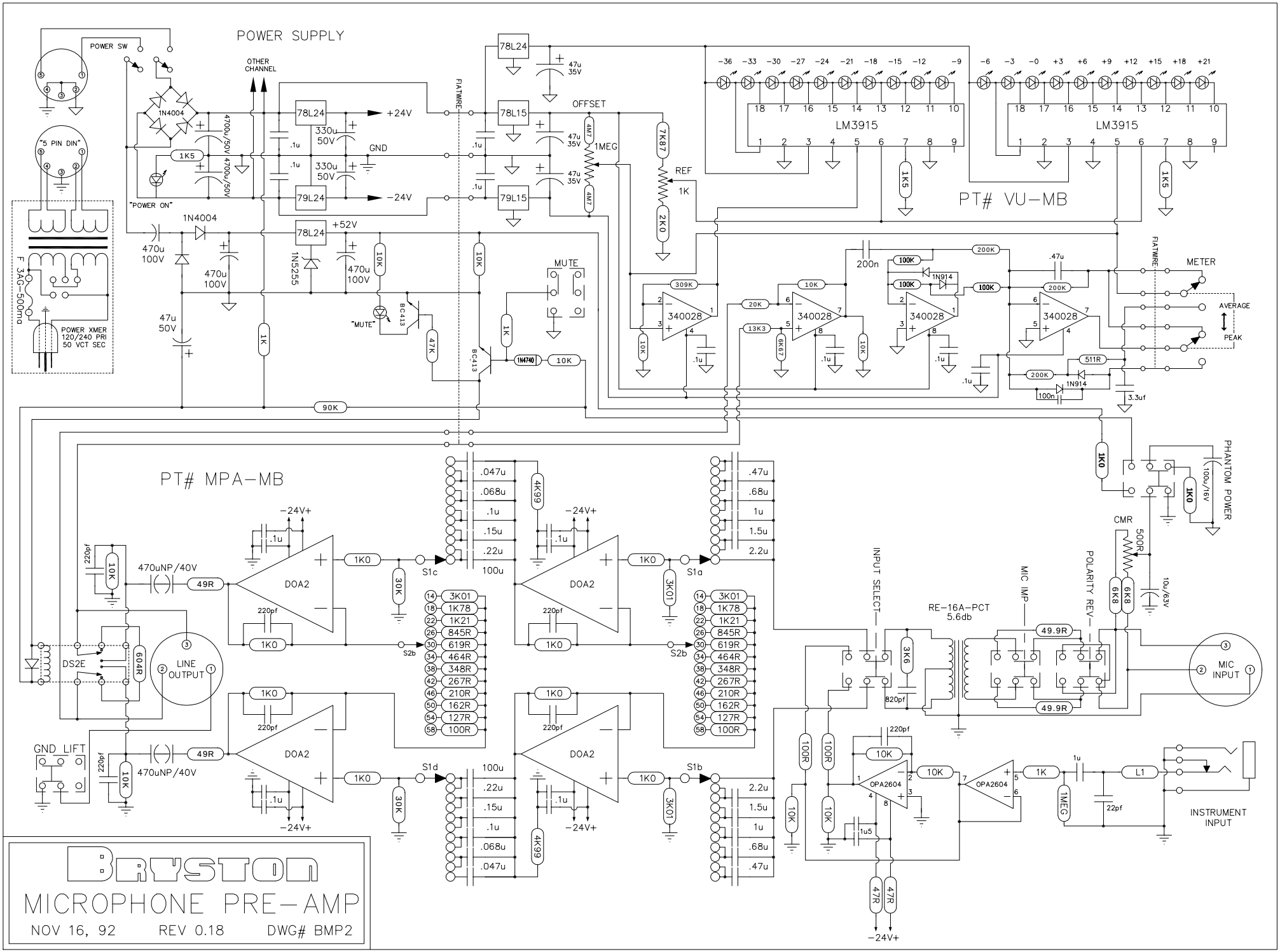
H: MIC IMP - 50/150 Switch
The microphone impedance switch should be selected to the setting which most closely matches the microphone manufacturers declared microphone impedance. This information is usually marked on each microphone and is expressed in ohms "Ω" and usually referenced to 1kHz.- see attached chart for impedance of many popular studio microphones. The 150Ω setting is for microphones with source impedance's from 150Ω to 600Ω. Microphones with lower impedance than 150Ω should be used in the 50Ω setting. Microphones with higher impedance than 600Ω will perform poorly if not properly matched to the pre-amp.

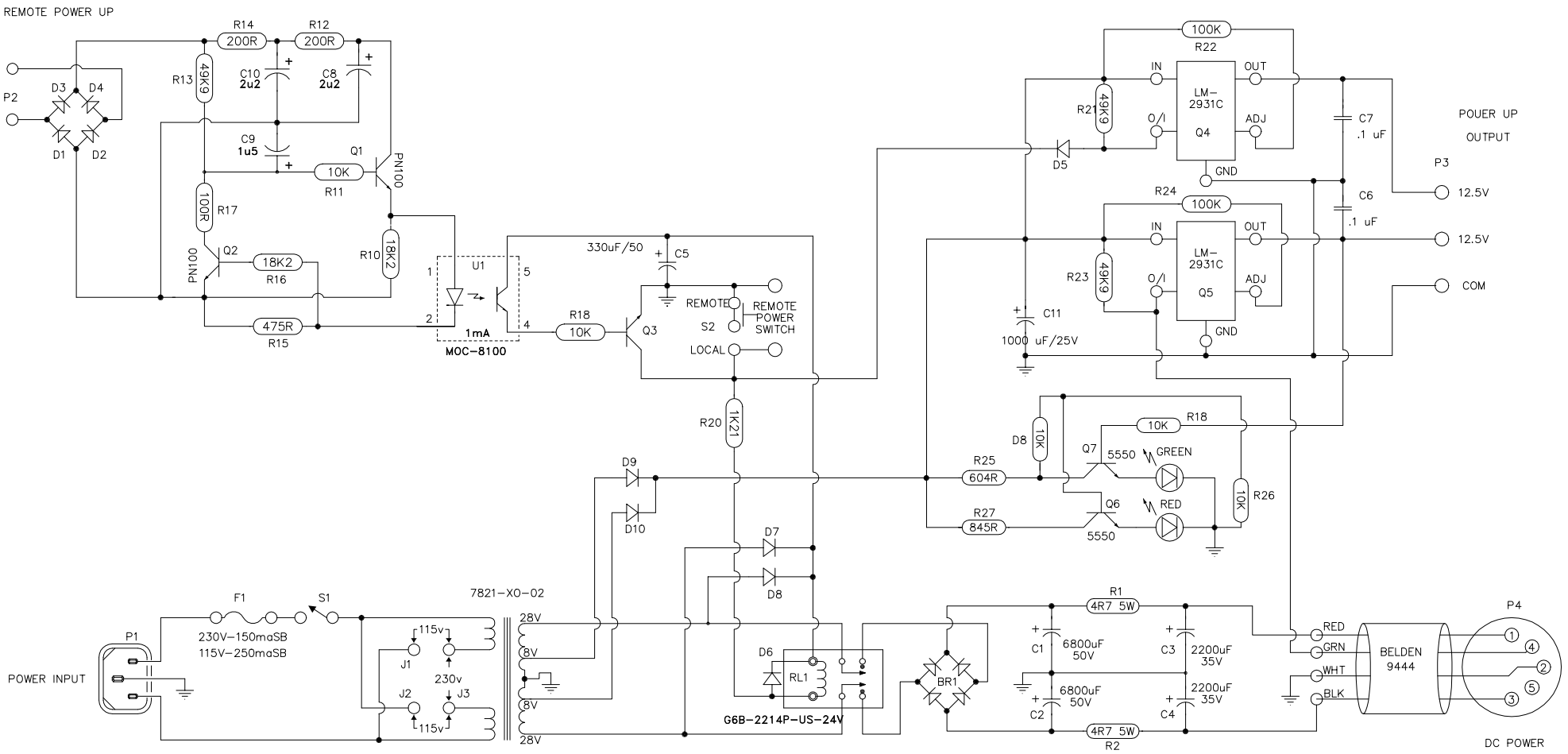
J: POLARITY - 0/180 Switch
The balanced MIC input uses pin 3 on the input connector as the in-phase (+) input.(switch position to "0") The polarity switch will reverse pins 2 and 3 at the input XLR connector so the in-phase input will be from pin 2. (switch position to "180") The microphone table lists the polarity of many common studio microphones.

K: METER - PK/AV Switch
The Program Meter selector for peak (PK) or average (AV) response of the meter. The Peak position response has fast attack with slow decay. The Average position has a response more like a "VU" meter with slower attack and much more rapid decay of the signal reading.

L: INSTRUMENT Input
1/4" unbalanced hi-impedance (1meg} input for using as a "Direct Box" for magnetic pickups etc.

M: PROGRAM METER
A 20 segment LED readout indicates channel program levels from -36dBr to +21dBr in 3 dB steps.. "0" dB = +4dBm. Set "peak" or "average" response using the "Meter PK/AV switch. (K)


POWER SUPPLY
POWER SW
OTHER CHANNEL
"5 PIN DIN"
"POWER ON"
F 3AG-500ma
POWER XMER 120/240 PRI 50 VCT SEC
1N4004
1K5
4700u/50V
78L24
79L24
78L15
79L15
+24V
-24V
+52V
GND
330u 50V
.1u
470u 100V
47u 50V
1N5255
BC413
"MUTE"
MUTE
1N4740
10K
1K
47K
90K
FLATWIRE
OFFSET
47u 35V
4M7
1MEG
7K87
REF
1K
2K0
LM3915
PT# VU-MB
309K
340028
20K
13K3
6K67
200n
100K
200K
1N914
.47u
511R
100n
3.3uf
METER
AVERAGE
PEAK
PT# MPA-MB
-24V+
DOA2
220pf
470uNP/40V
49R
1K0
30K
S1c
S1d
S1a
S1b
S2b
.047u
.068u
.1u
.15u
.22u
.47u
1u
1.5u
2.2u
4K99
100u
3K01
1K78
1K21
845R
619R
464R
348R
267R
210R
162R
127R
100R
DS2E
604R
LINE OUTPUT
GND_LIFT
INPUT SELECT
RE-16A-PCT
5.6db
3K6
820pf
MIC IMP
49.9R
POLARITY REV
CMR
500R
6K8
10u/63V
MIC INPUT
PHANTOM POWER
100u/16V
OPA2604
1u5
1MEG
22pf
L1
INSTRUMENT INPUT
47R
DRYSTON
MICROPHONE PRE-AMP
NOV 16, 92
REV 0.18
DWG# BMP2



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MPS-1 Power Supply REV 5

MPS-1 VER 5.0 MAIN SCHEMATIC

FILE: MPS1SCHM50.DWG PART No: MPS1MB50

DATE: AUG 2002	DWG BY: MRP	REV: 5.0

IMPORTANT SAFETY INSTRUCTIONS

The lightning flash with arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of un-insulated "dangerous voltage " within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPARATUS TO RAIN OR MOISTURE.

DO NOT EXPOSE THIS EQUIPMENT TO DRIPPING OR SPLASHING AND ENSURE THAT NO OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, ARE PLACED ON THE EQUIPMENT.

TO COMPLETELY DISCONNECT THIS EQUIPMENT FROM THE AC MAINS, DISCONNECT THE POWER SUPPLY CORD PLUG FROM THE AC RECEPTACLE.

THE MAINS PLUG OF THE POWER SUPPLY CORD SHALL REMAIN READILY OPERABLE.

BRYSTON LIMITED WARRANTY

Bryston analog audio circuits are warranted to be free from manufacturing defects for twenty (20) years from the original date of manufacture. The warranty includes parts and labour.

Bryston Digital circuits and cables are warranted for five years from the original date of manufacture. The warranty includes parts and labour.

Bryston products having motorized moving parts, excluding motorized volume controls, are warranted for three years from the original date of manufacture. The warranty includes parts and labour.

Bryston will remedy the problem by repair or replacement, as we deem necessary, to restore the product to full performance. Bryston will pay return shipping during the first three years of warranty coverage.

The warranty is fully transferable to the original owner and all subsequent owners during the warranty period. Warranty coverage is automatic and commences with the original date of manufacture which is kept on file at Bryston. In the event of a defect or malfunction, contact Bryston's repair centers for return authorization. Products must be returned using original packaging material only. Packing material may be purchased from Bryston if necessary. This warranty is considered void if the defect, malfunction or failure of the product or any component part was caused by damage (not resulting from a defect or malfunction) or abuse while in the possession of the customer. Tampering by persons other than factory authorized service personnel or failure to fully comply with Bryston operating instructions voids the warranty. This warranty gives you specific legal rights and you may also have other rights which may vary from province to province and country to country.

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E-mail: usaser@bryston.ca

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